

CPC**COOPERATIVE PATENT CLASSIFICATION****F23Q**

IGNITION (devices or installations peculiar to internal-combustion engines [F02P](#); of cigarettes or tobacco [A24E](#); compositions therefor, chemical igniters [C06C](#));
Extinguishing-devices

F23Q 1/00

Mechanical igniters (lighters containing fuel [F23Q 2/00](#); matches [C06F](#))

F23Q 1/02

- . using friction or shock effects

F23Q 1/04

- .. on a part moved by the fuel-controlling member, e.g. by a tap on a gas cooker

F23Q 1/06

- .. Portable igniters

F23Q 2/00

Lighters containing fuel, e.g. for cigarettes

F23Q 2/02

- . Lighters with liquid fuel {fuel which is fluid at atmospheric pressure}

F23Q 2/04

- .. with cerium-iron alloy and wick {with friction ignition}

F23Q 2/06

- ... with friction wheel

F23Q 2/08

- with ignition by spring action of the cover

F23Q 2/10

- ... with other friction member

F23Q 2/12

- .. with cerium-iron alloy without wick

F23Q 2/14

- .. with cerium-iron alloy and torch ignited by striking or pushing

F23Q 2/16

- . Lighters with gaseous fuel, e.g. the gas being stored in liquid phase

F23Q 2/161

- .. { with friction wheel}

WARNING

groups [F23Q 2/161](#) and [F23Q 2/165](#) are not complete, pending reorganisation. See also [F23Q 2/16](#)

F23Q 2/162

- .. {with non-adjustable gas flame (if electrically ignited [F23Q 2/28](#))}

F23Q 2/163

- ... {Burners (gas valves)}

F23Q 2/164

- .. {Arrangements for preventing undesired ignition}

F23Q 2/165

- .. { with more than one flame}

F23Q 2/167

- .. with adjustable flame

F23Q 2/173

- .. Valves therefor (valves in general [F16K](#))

F23Q 2/18

- . Lighters with solid fuel

F23Q 2/20

- .. with cerium-iron alloy and friction wheel

F23Q 2/22

- .. with cerium-iron alloy and tinder

F23Q 2/24

- .. ignition pills or strips with inflammable parts {(ignition pills [C06C 9/00](#), [C06C 15/00](#); corresponding lighters with fluid fuel [F23Q 2/10](#))}

F23Q 2/26

- .. combined with liquid fuel lighters

- F23Q 2/28 . Lighters characterised by electrical ignition of the fuel (lighter with electrically-produced sparks but without fuel [F23Q 3/00](#))
- F23Q 2/282 .. {with incandescent ignition (lighters with incandescent ignition but without fuel [F23Q 7/00](#))}
- F23Q 2/285 .. {with spark ignition}
- F23Q 2/287 ... {piezo-electric}
- F23Q 2/30 . Lighters characterised by catalytic ignition of fuel (catalytic igniters without fuel [C06C](#))
- F23Q 2/32 . Lighters characterised by being combined with other objects (combinations with smokers` equipment [A24F](#))
- F23Q 2/325 .. { combined with clock, timer or counter}

WARNING

groups [F23Q 2/325](#) is not complete, pending reorganisation. See also [F23Q 2/32](#)

- F23Q 2/34 . Component parts or accessories
- F23Q 2/345 .. { Scent-distribution or flame-colouring devices}

WARNING

[N: WARNING, groups [F23Q 2/345](#) is not complete, pending reorganisation. See also [F23Q 2/34](#)

- F23Q 2/36 .. Casings
- F23Q 2/365 ... { Tabletop lighters}

WARNING

groups [F23Q 2/365](#) is not complete, pending reorganisation. See also [F23Q 2/36](#)

- F23Q 2/38 ... with containers for flints or tools
- F23Q 2/40 .. Cover fastenings
- F23Q 2/42 .. Fuel containers; Closures for fuel containers
- F23Q 2/44 .. Wicks; Wick guides or fastenings
- F23Q 2/46 .. Friction wheels; Arrangement of friction wheels
- F23Q 2/48 .. Flint (composition, manufacture [C06C 15/00](#)); Guides for, or arrangements of, flints
- F23Q 2/50 .. Protecting coverings
- F23Q 2/52 .. Filling devices (in general [B67D](#))

F23Q 3/00 Igniters using electrically-produced sparks (sparking-plugs [H01T 13/00](#))

- F23Q 3/002 . {using piezo-electric elements}
- F23Q 3/004 . {Using semiconductor elements}

- F23Q 3/006 . {Details (sparking-plugs [H01T 13/00](#))}
- F23Q 3/008 . {Structurally associated with fluid-fuel burners}
- F23Q 3/01 . Hand-held lighters, e.g. for cigarettes
- F23Q 5/00** **Make-and-break ignition, i.e. with spark generated between electrodes by breaking contact therebetween (specially adapted for internal-combustion engines [F02P 15/00](#))**
- F23Q 7/00** **Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes (circuits therefor [H01T 15/00](#)); Electrically-heated glowing plugs**
- F23Q 7/001 . {Glowing plugs for internal-combustion engines}
- F23Q 7/02 . for igniting solid fuel
- F23Q 7/04 . . with fans for transfer of heat to fuel
- F23Q 7/06 . structurally associated with fluid-fuel burners (lighters containing fuel [F23Q 2/00](#))
- F23Q 7/08 . . for evaporating and igniting liquid fuel, e.g. in hurricane lanterns
- F23Q 7/10 . . for gaseous fuel, e.g. in welding applicances
- F23Q 7/12 . . . actuated by gas-controlling device
- F23Q 7/14 . Portable igniters
- F23Q 7/16 . . with built-in battery
- F23Q 7/18 . . with built-in generator
- F23Q 7/20 . . with built-in mains transformer
- F23Q 7/22 . Details
- F23Q 7/24 . . Safety arrangements
- F23Q 7/26 . . . Provision for re-ignition
- F23Q 9/00** **Pilot flame igniters**
- F23Q 9/02 . without interlock with main fuel supply
- F23Q 9/04 . . for upright burners, e.g. gas-cooker burners
- F23Q 9/045 . . . {Structurally associated with a main-burner}
- F23Q 9/06 . . for inverted burners, e.g. gas lamps
- F23Q 9/08 . with interlock with main fuel supply
- F23Q 9/10 . . to determine the sequence of supply of fuel to pilot and main burners
- F23Q 9/12 . . to permit the supply to the main burner in dependence upon existence of pilot flame
- F23Q 9/14 . . . using electric means, e.g. by light-sensitive elements
- F23Q 11/00** **Arrangement of catalytic igniters (catalytic igniters per se [C06C](#))**

- F23Q 11/04 . at the burner
 - F23Q 11/06 . remote from the burner, e.g. on the chimney of a lamp
 - F23Q 11/08 . on a part moved by the fuel controlling member
 - F23Q 11/10 . . and moving out of the flame after ignition
- F23Q 13/00 Igniters not otherwise provided for**
- F23Q 13/005 . { using light, e.g. sunlight or laser}
 - F23Q 13/02 . using gas burners, e.g. gas pokers
 - F23Q 13/04 . using portable burners, e.g. torches, fire pots
- F23Q 21/00 Devices for effecting ignition from a remote location**
- F23Q 23/00 Testing of ignition installations (peculiar to internal combustion engines [F02P 17/00](#))**
- F23Q 23/02 . Testing of ignition timing
 - F23Q 23/08 . Testing of components (of sparking plugs [H01T 13/58](#), [F02P 17/12](#))
 - F23Q 23/10 . . electrically
- F23Q 25/00 Extinguishing-devices, e.g. for blowing-out or snuffing candle flames (for cigarettes [A24F](#))**
- F23Q 2007/00 Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes (circuits therefor [H01T 15/00](#)); Electrically-heated glowing plugs**
- F23Q 2007/001 . {Glowing plugs for internal-combustion engines}
 - F23Q 2007/002 . . with sensing means
 - F23Q 2007/004 . . Manufacturing or assembling methods
 - F23Q 2007/005 . . . pressure sensors
 - F23Q 2007/007 . . . ion current sensors
 - F23Q 2007/008 . . . temperature sensors